**Line positions and absolute intensities of nitric acid from 850 to 920 $cm^{-1}$**

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## ABSTRACT

Line positions and strengths of $HNO_3$ from 850 to 920 $cm^{-1}$ have been retrieved from room temperature spectra recorded at 0.00265 $cm^{-1}$ resolution using the FTS at Kitt Peak and flowing gas samples.

## SUMMARY

Some 800 transitions of $\nu_5$ and 550 lines of $2\nu_9$ have been measured with precisions of 3 to 8%. Measurements of an additional 438 features with ambiguous assignments have also been obtained with 10% - 15% precisions. These include a few strong absorptions between 885.414 $cm^{-1}$ and 885.470 $cm^{-1}$ which are recognized as the Q-branch of $\nu_5+\nu_9-\nu_9$. The measured line intensities and band strengths of the $\nu_5$ and $2\nu_9$ bands have been compared to prior measurements and to values given in the HITRAN compilation; the average of the ratios, this work/HITRAN, was found to be 0.92 ± 11%. The analysis of these data has been greatly hindered by the high density of transitions and the lack of knowledge about several other hot bands in the region.

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